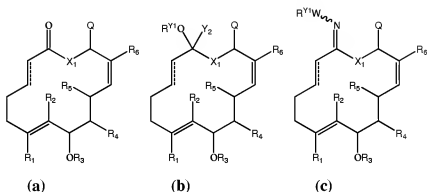


AMENDMENTS TO THE CLAIMS

The following **Listing of Claims** will replace all prior versions, and listings of claims in the application.

1-78. (Cancelled)

79. (New) A compound having one of the following structures:



or pharmaceutically acceptable salt thereof;

wherein **R₁** and **R₂** are hydrogen or lower alkyl;

R₃, **R₅** and **R₆** are C₁₋₆ alkyl;

the bond is a single bond or a double bond;

R₄ is halogen, -OR^{4A}, -OC(=O)R^{4A} or -NR^{4A}R^{4B}; wherein R^{4A} and R^{4B} are independently hydrogen; a nitrogen protecting group selected from a carbamate, an amide, a cyclic imide derivative, an N-alkyl amine, an N-aryl amine, an imine derivative or an enamine derivative or an oxygen protecting group selected from a substituted methyl ether, a substituted ethyl ether, a substituted benzyl ether, a silyl ether, an ester, a carbonate, a cyclic acetal or a ketal; or R^{4A} and R^{4B}, taken together with the nitrogen atom to which they are attached, form a C₃₋₂₀ heterocyclic or C₃₋₁₄ heteroaryl moiety; or R₄, taken together with the carbon atom to which it is attached

forms a moiety having the structure:

or



or R^{4A} and R^{4B} are independently a C_{1-6} alkyl group optionally substituted with one or more of C_{1-20} aliphatic; C_{3-14} aryl; C_{3-14} heteroaryl; C_{1-20} alkyl C_{3-14} aryl; C_{1-20} alkyl C_{3-14} heteroaryl; C_{3-14} aryloxy; C_{1-20} heteroalkoxy; C_{3-14} heteroaryloxy; C_{1-20} alkylthio; C_{3-14} arylthio; hetero C_{1-20} alkylthio; hetero C_{3-14} arylthio; F; Cl; Br; I; -OH; -NO₂; -CN; -CF₃; -CH₂CF₃; -CHCl₂; -CH₂OH; -CH₂CH₂OH; -CH₂NH₂; -CH₂SO₂CH₃; -C(O) R_x ; -CO₂(R_x); -CON(R_x)₂; -OC(O) R_x ; -OCO R_x ; -OCON(R_x)₂; -N(R_x)₂; S(O)₂ R_x ; -NR_x(CO) R_x wherein each occurrence of R_x is independently C_{1-20} aliphatic, hetero C_{1-20} aliphatic, C_{3-14} aryl, C_{3-14} heteroaryl, C_{1-20} alkyl C_{3-14} aryl or C_{1-20} alkyl C_{3-14} heteroaryl;


X_1 is O, S, NR^{X1} or CR^{X1}R^{X2}; wherein R^{X1} and R^{X2} are independently hydrogen, halogen, or a substituted or unsubstituted C_{1-20} alkyl, hetero C_{1-20} alkyl, cyclo C_{3-10} alkyl, heterocyclo C_{3-10} alkyl, C_{3-14} aryl or C_{3-14} heteroaryl, or a nitrogen protecting group selected from a carbamate, an amide, a cyclic imide derivative, an N-alkyl amine, an N-aryl amine, an imine derivative or an enamine derivative;

Q is hydrogen, halogen, -CN, -S(O)₁₋₂R^{Q1}, -NO₂, -COR^{Q1}, -CO₂R^{Q1}, -NR^{Q1}C(=O)R^{Q2}, -NR^{Q1}C(=O)OR^{Q2}, -CONR^{Q1}R^{Q2}, or a substituted or unsubstituted C_{1-20} aliphatic, hetero C_{1-20} aliphatic, C_{3-20} alicyclic, hetero C_{3-20} alicyclic, C_{3-14} aryl or C_{3-14} heteroaryl moiety, or -WR^{Q1}; wherein W is independently O, S or NR^{Q3} and each occurrence of R^{Q1}, R^{Q2} and R^{Q3} is independently hydrogen, or a substituted or unsubstituted C_{1-20} aliphatic, hetero C_{1-20} aliphatic, C_{3-20} alicyclic, hetero C_{3-20} alicyclic, C_{3-14} aryl or C_{3-14} heteroaryl moiety;

Y_2 is hydrogen, or a substituted or unsubstituted C_{1-20} alkyl, hetero C_{1-20} alkyl, cyclo C_{3-10} alkyl, heterocyclo C_{3-10} alkyl, C_{3-14} aryl, or C_{3-14} heteroaryl moiety; or -WR^{Y1};

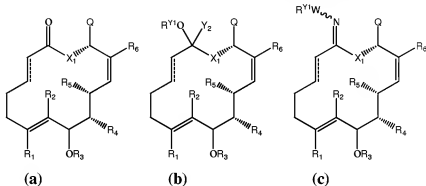
W is O or NH; and

R^{Y1} and R^{Y2} are independently hydrogen, or a substituted or unsubstituted C_{1-20} aliphatic, hetero C_{1-20} aliphatic, C_{3-20} alicyclic, hetero C_{3-20} alicyclic, C_{3-14} aryl or C_{3-14} heteroaryl moiety;

wherein for the compound of formula (a), when X^1 is O and the bond  is a double bond, Q is hydrogen, halogen, -CN, -S(O)₁₋₂R^{Q1}, -NO₂, -COR^{Q1}, -CO₂R^{Q1}, -NR^{Q1}C(=O)R^{Q2}, -NR^{Q1}C(=O)OR^{Q2}, -CONR^{Q1}R^{Q2}, or -WR^{Q1}; wherein W is independently O, S or NR^{Q3} and each occurrence of R^{Q1}, R^{Q2} and R^{Q3} is independently hydrogen, or a substituted or unsubstituted C_{1-20}

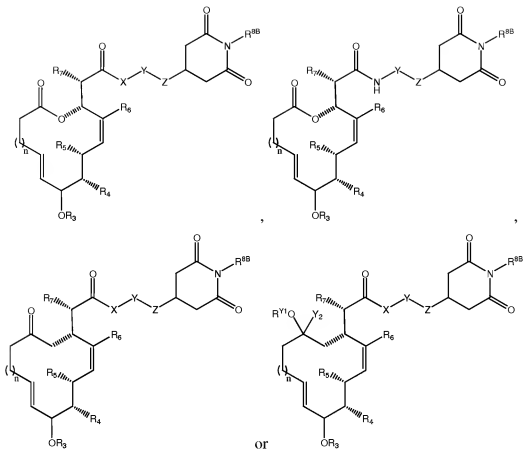
aliphatic, heteroC₁₋₂₀aliphatic, C₃₋₂₀ alicyclic, heteroC₃₋₂₀ alicyclic, C₃₋₁₄aryl or C₃₋₁₄ heteroaryl moiety.

80. (New) The compound of claim 1 having one of the following structures:



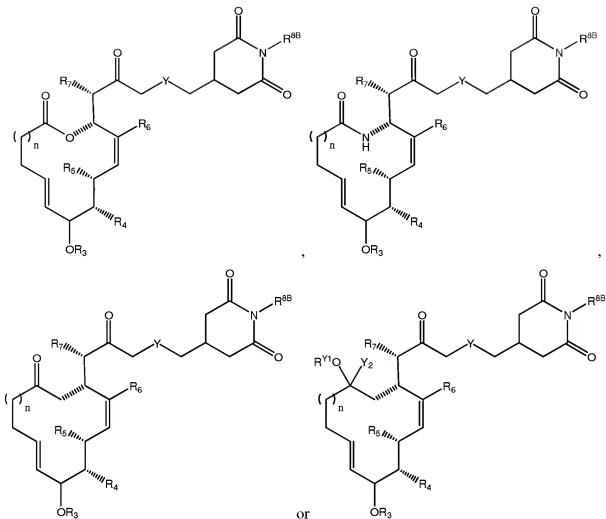
or pharmaceutically acceptable salt thereof.

81. (New) The compound of claim 2, wherein the compound has the structure:



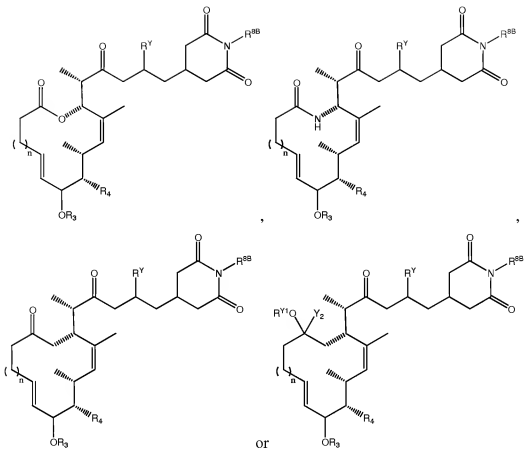
wherein n is 3; Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety; R^{8B} is hydrogen or C_{1-6} alkyl; and X , Y and Z are independently a bond, $-O-$, $-S-$, $-C(=O)-$, $-NR^{Z1}-$, $-CHOR^{Z1}-$, $-CHNR^{Z1}R^{Z2}-$, $C=S$, $C=N(R^{Y1})$ or $-CH(Hal)$; or a substituted or unsubstituted C_{0-6} alkylidene or C_{0-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO , CO_2 , $COCO$, $CONR^{Z1}$, $OCONR^{Z1}$, $NR^{Z1}NR^{Z2}$, $NR^{Z1}NR^{Z2}CO$, $NR^{Z1}CO$, $NR^{Z1}CO_2$, $NR^{Z1}CONR^{Z2}$, SO , SO_2 , $NR^{Z1}SO_2$, SO_2NR^{Z1} , $NR^{Z1}SO_2NR^{Z2}$, O , S , or NR^{Z1} ; wherein Hal is a halogen selected from F , Cl , Br and I ; and each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, C_{1-20} alkyl, hetero C_{1-20} alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl; or R^{Z1} and R^{Z2} , taken together with the nitrogen atom to which they are attached, form a heterocyclic or heteroaryl moiety; or pharmaceutically acceptable salt thereof.

82. (New) The compound of claim 2, wherein the compound has the structure:



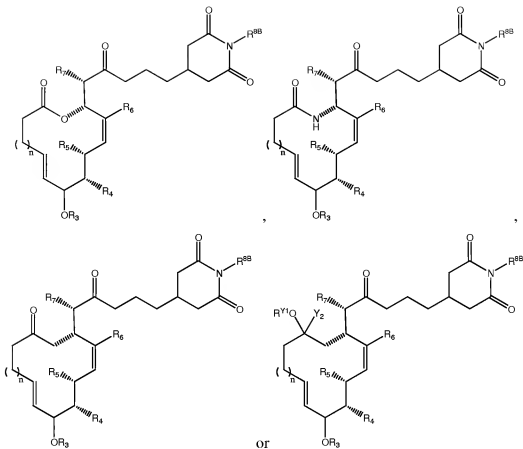
wherein n is 3; Y₂ and R^{Y1} are independently hydrogen or C₁₋₆ alkyl; R₇ is a substituted or unsubstituted, linear or branched, cyclic or acyclic C₁₋₆ alkyl moiety; R^{8B} is hydrogen or C₁₋₆ alkyl; and Y is -CHOR^{Y1}, -CHNR^{Y1}R^{Y2}, C=O, C=S, C=N(R^{Y1}) or -CH(Hal); wherein Hal is a halogen selected from F, Cl, Br and I; and R^{Y1} and R^{Y2} are independently hydrogen, C₁₋₂₀ alkyl, heteroC₁₋₂₀ alkyl, C₃₋₁₄ aryl, C₃₋₁₄ heteroaryl or C₁₋₂₀ acyl, or R^{Y1} and R^{Y2}, taken together with the nitrogen atom to which they are attached, form a heterocyclic or heteroaryl moiety; or a pharmaceutically acceptable salt thereof.

83. (New) The compound of claim 2, wherein the compound has the structure:



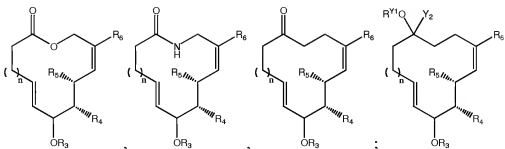
wherein n is 3; Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl; R^{8B} is hydrogen or C_{1-6} alkyl; and R^Y is hydrogen, halogen, $-OR^{Y1}$ or $-NR^{Y1}NR^{Y2}$; wherein R^{Y1} and R^{Y2} are independently hydrogen, C_{1-20} alkyl, hetero C_{1-20} alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, form a heterocyclic or heteroaryl moiety; or a pharmaceutically acceptable salt thereof.

84. (New) The compound of claim 80, wherein the compound has the structure:



wherein n is 3; Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety; and R^{8B} is hydrogen or C_{1-6} alkyl;
or a pharmaceutically acceptable salt thereof.

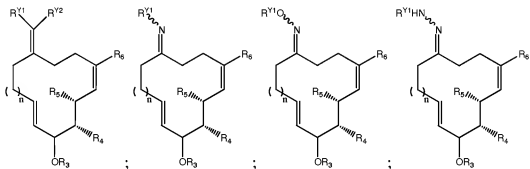
85. (New) The compound of claim 79, wherein the compound has the structure:



wherein n is 3; and Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl;

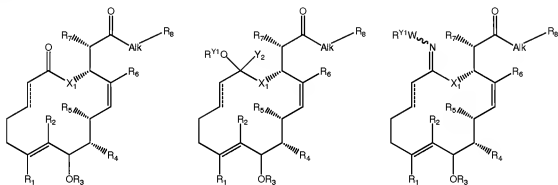
or a pharmaceutically acceptable salt thereof.

86. (New) The compound of claim 79, wherein the compound has the structure:



wherein n is 3; and R^{Y1} and R^{Y2} are independently hydrogen or C₁₋₆ alkyl;
or a pharmaceutically acceptable salt thereof.

87. (New) The compound of claim 80, wherein the compound has one of the following structures:



W is O or NH;

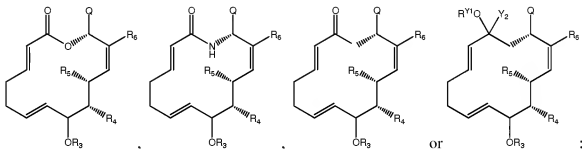
R^{Y1} is hydrogen, or a substituted or unsubstituted C₁₋₂₀ aliphatic, heteroC₁₋₂₀aliphatic, C₃₋₂₀ alicyclic, heteroC₃₋₂₀alicyclic, C₃₋₁₄ aryl or C₃₋₁₄ heteroaryl moiety;

R₇ is a substituted or unsubstituted C₁₋₆ alkyl or heteroC₁₋₆alkyl moiety;

R₈ is a substituted or unsubstituted C₁₋₂₀ alkyl, heteroC₁₋₂₀alkyl, cycloC₃₋₂₀alkyl, heterocycloC₃₋₂₀alkyl, C₃₋₁₄ aryl or C₃₋₁₄ heteroaryl moiety; and Alk is a substituted or unsubstituted C₀₋₆alkylidene or C₀₋₆alkenylidene chain wherein up to two non-adjacent

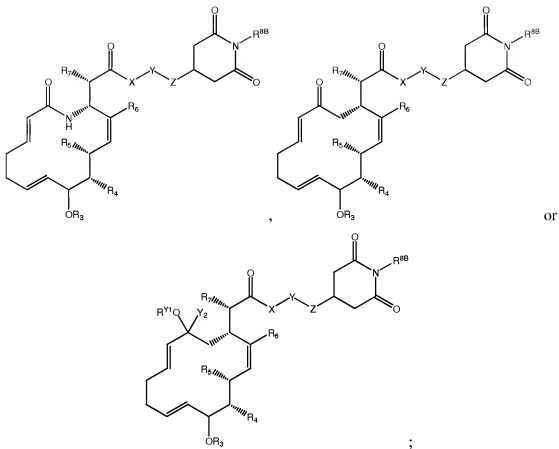
methylene units are independently optionally replaced by CO, CO₂, COCO, CONR^{Z1}, OCONR^{Z1}, NR^{Z1}NR^{Z2}, NR^{Z1}NR^{Z2}CO, NR^{Z1}CO, NR^{Z1}CO₂, NR^{Z1}CONR^{Z2}, SO, SO₂, NR^{Z1}SO₂, SO₂NR^{Z1}, NR^{Z1}SO₂NR^{Z2}, O, S, or NR^{Z1}; wherein each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, C₁₋₂₀ alkyl, heteroC₁₋₂₀ alkyl, C₃₋₁₄ aryl, C₃₋₁₄ heteroaryl or C₁₋₂₀ acyl; wherein for compounds of formula (a), when X¹ is O, the bond ~~~ is a single bond; or a pharmaceutically acceptable salt thereof.

88. (New) The compound of claim 80, wherein the compound has one of the following structures:



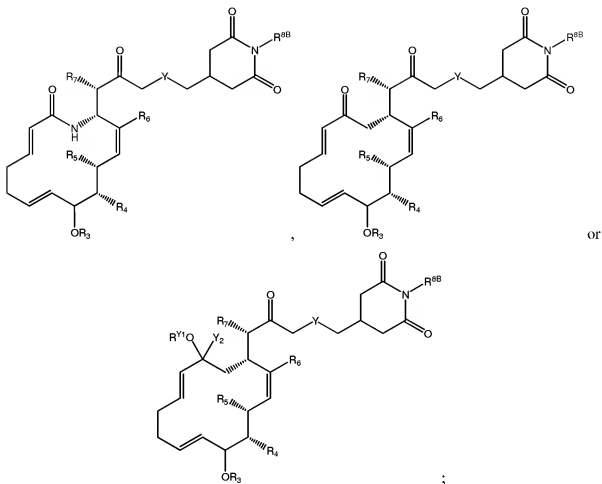
wherein Y₂ and R^{Y1} are independently hydrogen or C₁₋₆ alkyl; or a pharmaceutically acceptable salt thereof.

89. (New) The compound of claim 80, wherein the compound has one of the following structures:



wherein Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl; R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety; R^{8B} is hydrogen or C_{1-6} alkyl; and X, Y and Z are independently a bond, -O-, -S-, -C(=O)-, -NR^{Z1}-, -CHOR^{Z1}-, -CHNR^{Z1}R^{Z2}, C=S, C=N(R^{Y1}) or -CH(Hal); or a substituted or unsubstituted C_{0-6} alkylidene or C_{0-6} alkenylidene chain wherein up to two non-adjacent methylene units are independently optionally replaced by CO, CO₂, COCO, CONR^{Z1}, OCONR^{Z1}, NR^{Z1}NR^{Z2}, NR^{Z1}NR^{Z2}CO, NR^{Z1}CO, NR^{Z1}CO₂, NR^{Z1}CONR^{Z2}, SO, SO₂, NR^{Z1}SO₂, SO₂NR^{Z1}, NR^{Z1}SO₂NR^{Z2}, O, S, or NR^{Z1}; wherein Hal is a halogen selected from F, Cl, Br and I; and each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, C_{1-20} alkyl, hetero C_{1-20} alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl; or R^{Z1} and R^{Z2}, taken together with the nitrogen atom to which they are attached, form a C_{3-20} heterocyclic or C_{3-14} heteroaryl moiety; or a pharmaceutically acceptable salt thereof.

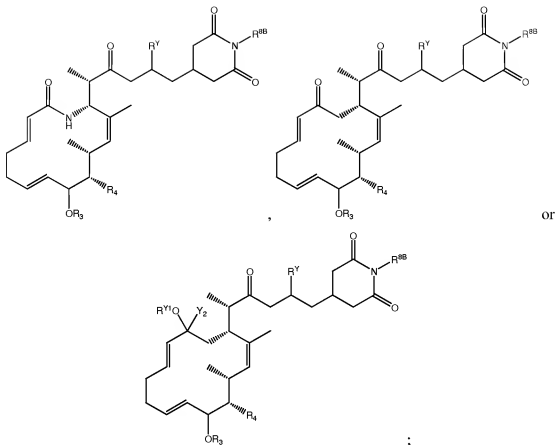
90. (New) The compound of claim 80, wherein the compound has one of the following structures:



Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl;

R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety; R^{8B} is hydrogen or C_{1-6} alkyl; and Y is $-\text{CHOR}^{Y1}$, $-\text{CHNR}^{Y1}\text{R}^{Y2}$, C=O , C=S , $\text{C=N(R}^{Y1})$ or $-\text{CH(Hal)}$; wherein Hal is a halogen selected from F, Cl, Br and I; and R^{Y1} and R^{Y2} are independently hydrogen, C_{1-20} alkyl, hetero C_{1-20} alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, form a C_{3-20} heterocyclic or C_{3-14} heteroaryl moiety;
or a pharmaceutically acceptable salt thereof.

91. (New) The compound of claim 80, wherein the compound has one of the following structures:



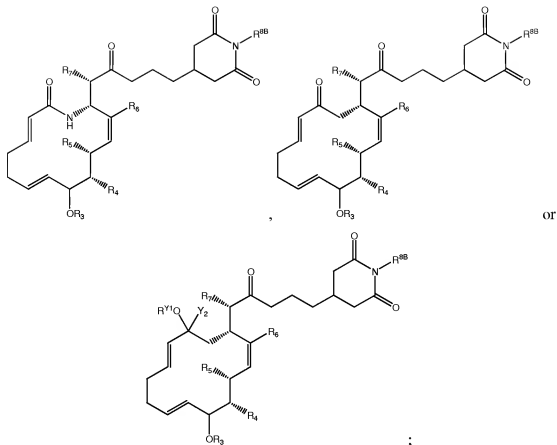
wherein Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl;

R^{8B} is hydrogen or C_{1-6} alkyl; and R^Y is hydrogen, halogen, $-OR^{Y1}$ or $-NR^{Y1}NR^{Y2}$;

wherein R^{Y1} and R^{Y2} are independently hydrogen, C_{1-20} alkyl, hetero C_{1-20} alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl, or R^{Y1} and R^{Y2} , taken together with the nitrogen atom to which they are attached, form a C_{3-20} heterocyclic or C_{3-14} heteroaryl moiety;

or a pharmaceutically acceptable salt thereof.

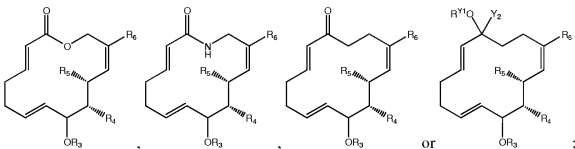
92. (New) The compound of claim 80, wherein the compound has one of the following structures:



wherein Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl;

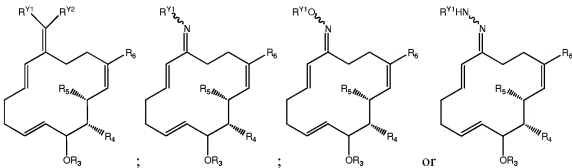
R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety;
and R^{8B} is hydrogen or C_{1-6} alkyl;
or a pharmaceutically acceptable salt thereof.

93. (New) The compound of claim 79, wherein the compound has one of the following structures:



wherein Y_2 and R^{Y1} are independently hydrogen or C_{1-6} alkyl;
or a pharmaceutically acceptable salt thereof.

94. (New) The compound of claim 79, wherein the compound has one of the following structures:



and R^{Y1} and R^{Y2} are independently hydrogen or C₁₋₆ alkyl;
or a pharmaceutically acceptable salt thereof.

95. (New) The compound of claim 79, wherein R₁ and R₂ are each hydrogen.

96. (New) The compound of claim 79, wherein R₃ is C₁₋₆ alkyl.

97. (New) The compound of claim 96, wherein R₃ is methyl.

98. (New) The compound of claim 79, wherein R₅ and R₆ are each methyl;
R₄ is OH, OAc, NH₂ or halogen, or R₄ taken together with the carbon atom to which it is

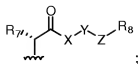
attached forms a moiety having the structure:

The image shows a chemical structure of a moiety, which is a carbon atom double-bonded to an oxygen atom and single-bonded to two other groups, represented by wavy lines.

99. (New) The compound according to any one of claims 81 or 89, wherein R₇ is C₁₋₆ alkyl.

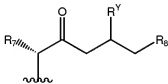
100. (New) The compound according to claim 99, wherein R₇ is methyl.

101. (New) The compound according to claim 79 of formula (b) or (c) or the compound of
formula (a) wherein when X¹ is O, the bond is a single bond, wherein Q has the structure:



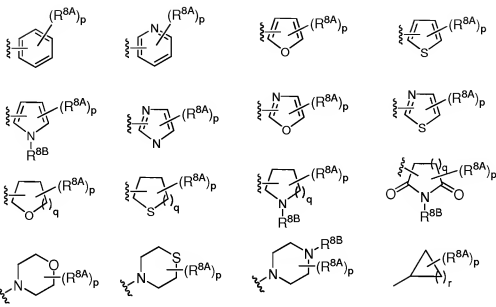
wherein R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety; R_8 is a substituted or unsubstituted C_{3-20} carbocyclic, C_{3-20} heterocyclic, C_{3-14} aryl or C_{3-14} heteroaryl moiety; and X, Y and Z are independently a bond, -O-, -S-, -C(=O)-, -NR^{Z1}-, -CHOR^{Z1}-, -CHNR^{Z1}R^{Z2}-, C=S, C=N(R^{Y1}) OR -CH(Hal); or a substituted or unsubstituted C_{0-6} alkylidene or C_{0-6} alkenylidene chain where up to two non-adjacent methylene units are independently optionally replaced by CO, CO₂, COCO, CONR^{Z1}, OCONR^{Z1}, NR^{Z1}NR^{Z2}, NR^{Z1}NR^{Z2}CO, NR^{Z1}CO, NR^{Z1}CO₂, NR^{Z1}CONR^{Z2}, SO, SO₂, NR^{Z1}SO₂, SO₂NR^{Z1}, NR^{Z1}SO₂NR^{Z2}, O, S, or NR^{Z1}; wherein Hal is a halogen selected from F, Cl, Br and I; and each occurrence of R^{Z1} and R^{Z2} is independently hydrogen, C_{1-20} alkyl, heteroC₁₋₂₀alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl; or R^{Z1} and R^{Z2}, taken together with the nitrogen atom to which they are attached, form a C_{3-20} heterocyclic or C_{3-14} heteroaryl moiety.

102. (New) The compound according to claim 79 of formula (b) or (c) or the compound of formula (a) wherein when X¹ is O, the bond is a single bond, wherein Q has the structure:



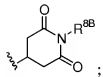
wherein R_7 is a substituted or unsubstituted, linear or branched, cyclic or acyclic C_{1-6} alkyl moiety; R_8 is a substituted or unsubstituted C_{3-20} carbocyclic, C_{3-20} heterocyclic, C_{3-14} aryl or C_{3-14} heteroaryl moiety; and R^Y is hydrogen, halogen, -OR^{Y1} or -NR^{Y1}NR^{Y2}; wherein R^{Y1} and R^{Y2} are independently hydrogen, C_{1-20} alkyl, heteroC₁₋₂₀alkyl, C_{3-14} aryl, C_{3-14} heteroaryl or C_{1-20} acyl, or R^{Y1} and R^{Y2}, taken together with the nitrogen atom to which they are attached, form a C_{3-20} heterocyclic or C_{3-14} heteroaryl moiety.

103. (New) The compound of any one of claims 87, 98, or 99, wherein R_8 is one of:



wherein p is an integer from 0 to 5, as valency allows; q is 1 or 2, r is an integer from 1 to 6; each occurrence of R^{8A} is independently hydrogen, C_{1-20} alkyl, hetero C_{1-20} alkyl, C_{3-14} aryl, C_{3-14} heteroaryl, $-(C_{1-20} \text{ alkyl})C_{3-14}$ aryl or $-(C_{1-20} \text{ alkyl})C_{3-14}$ heteroaryl, $-OR^{8C}$, $-SR^{8C}$, $-N(R^{8C})_2$, $-SO_2N(R^{8C})_2$, $-(C=O)N(R^{8C})_2$, halogen, $-CN$, $-NO_2$, $-(C=O)OR^{8C}$, $-N(R^{8C})(C=O)R^{8D}$, wherein each occurrence of R^{8C} and R^{8D} is independently hydrogen, C_{1-6} alkyl, C_{1-6} heteroalkyl, C_{3-14} aryl, C_{3-14} heteroaryl, $-(C_{1-20} \text{ alkyl})C_{1-20}$ aryl or $-(C_{1-20} \text{ alkyl})C_{3-14}$ heteroaryl; and each occurrence of R^{8B} is independently hydrogen or C_{1-6} alkyl.

104. **(New)** The compound of claim 103, wherein R_8 has the structure:

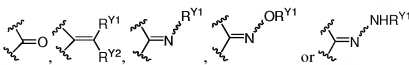


wherein R^{8B} is hydrogen or C_{1-6} alkyl.

105. **(New)** The compound of claim 80 or 87, wherein Y_2 is C_{1-6} alkyl and R^{Y1} is hydrogen or C_{1-6} alkyl.


106. **(New)** The compound of claim 80 or 87, wherein R^{Y1} is H and Y_2 is CF_3 .


107. (New) The compound of claim 94, wherein R₄ is hydroxyl, C₁₋₆ alkoxy, acyloxy, amino or halogen, or R₄ taken together with the carbon atom to which it is attached forms a moiety


having the structure: ; wherein R^{Y1} and R^{Y2} are independently hydrogen, C₁₋₆ alkyl, C₃₋₁₄ aryl or C₃₋₁₄ heteroaryl.


108. (New) The compound of claim 94, wherein R₄ is OH, OAc, NH₂ or F, or R₄ taken together with the carbon atom to which it is attached forms a moiety having the structure:






109. (New) The compound of claim 94, wherein the stereocenter  has the following

stereochemistry: .

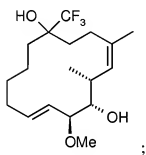
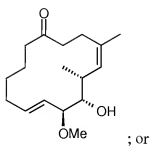
110. (New) The compound of claim 94, wherein the stereocenter  has the following

stereochemistry: .

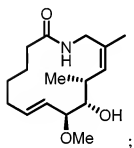
111. (New) The compound of claim 94, wherein R₃, R₅ and R₆ are each methyl and R₄ is OH, OAc, NH₂ or F, or R₄ taken together with the carbon atom to which it is attached forms a moiety

having the structure: ; and the stereocenter  has the following stereochemistry .

112. (New) The compound according to claim 79, wherein the compound is selected from:

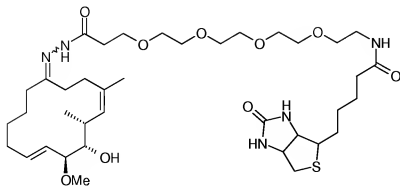


or



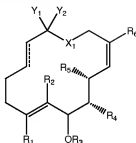
or a pharmaceutically acceptable salt thereof.

113. (New) A compound having the formula



or pharmaceutically acceptable salt thereof.

114. (New) A compound having the structure:

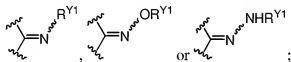


or pharmaceutically acceptable salt thereof;

wherein **R**₁ and **R**₂ are each independently hydrogen

R₃, **R**₅ and **R**₆ are C₁₋₆ alkyl;

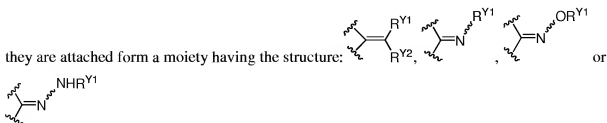
R₄ is halogen, -OR^{4A}, -OC(=O)R^{4A} or -NR^{4A}R^{4B}; wherein R^{4A} and R^{4B} are independently hydrogen, or substituted or unsubstituted C₁₋₆ alkyl; a nitrogen protecting group selected from a carbamate, an amide, a cyclic imide derivative, an N-alkyl amine, an N-aryl amine, an imine derivative or an enamine derivative or an oxygen protecting group selected from a methyl ether, a substituted methyl ether, a substituted ethyl ether, a substituted benzyl ether, a silyl ether, an ester, a carbonate, a cyclic acetal or a ketal; or R^{4A} and R^{4B}, taken together with the nitrogen atom to which they are attached, form a C₃₋₂₀ heterocyclic or C₃₋₁₄ heteroaryl moiety; or R₄, taken together with the carbon atom to which it is attached forms a moiety having the structure:



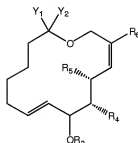
X₁ is O, S, NR^{X1} or CR^{X1}R^{X2}; wherein R^{X1} and R^{X2} are independently hydrogen, halogen, or substituted or unsubstituted C₁₋₂₀ alkyl, heteroC₁₋₂₀alkyl, cycloC₃₋₁₀alkyl, heterocycloC₃₋₁₀alkyl, C₃₋₁₄ aryl or C₃₋₁₄ heteroaryl, or a nitrogen protecting group selected from a carbamate, an amide, a cyclic imide derivative, an N-alkyl amine, an N-aryl amine, an imine derivative or an enamine derivative; and

Y₁ and **Y**₂ are independently hydrogen, or a substituted or unsubstituted C₁₋₂₀ alkyl, heteroC₁₋₂₀alkyl, cycloC₃₋₁₀alkyl, heterocycloC₃₋₁₀alkyl, C₃₋₁₄aryl, or C₃₋₁₄ heteroaryl moiety; or -WR^{Y1}; wherein W is independently -O-, -S- or NR^{Y2} wherein each occurrence of R^{Y1} and R^{Y2}

is independently hydrogen or an C₁₋₂₀ alkyl, heteroC₁₋₂₀alkyl, cycloC₃₋₁₀alkyl, heterocycloC₃₋₁₀alkyl, C₃₋₁₄ aryl or C₃₋₁₄ heteroaryl moiety; or Y₁ and Y₂ together with the carbon atom to which

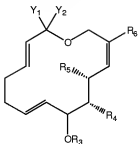


115. (New) The compound of claim 114 having the structure:



wherein n is 3; and Y₁ and Y₂ are independently hydrogen, C₁₋₆alkyl, or CF₃.

116. (New) The compound of claim 114 having the structure:



wherein Y₁ and Y₂ are independently hydrogen, C₁₋₆alkyl, or CF₃.

117. (New) The compound of claim 115 or 116, wherein R₅ and R₆ are each methyl.

118. (New) The compound of claim 115 or 116, wherein R₃ is lower alkyl.

119. (New) The compound of claim 118, wherein R₃ is methyl.

120. (New) The compound of claim 115 or 116, wherein R₄ is OH, OAc, NH₂ or halogen.
121. (New) A pharmaceutical composition comprising:
a pharmaceutically acceptable carrier, adjuvant or vehicle; and
a compound according to any one of claims 79, 112, 113, or 114, or a
pharmaceutically acceptable salt thereof.
122. (New) The pharmaceutical composition of claim 121, further comprising a cytotoxic agent.
123. (New) The pharmaceutical composition of claim 122, wherein the cytotoxic agent is an anticancer agent.
124. (New) The pharmaceutical composition of claim 123, wherein the anticancer agent is 12,13-desoxyepothilone B, (E)-9,10-dehydro-12,13-desoxyEpoB, 26-CF3-(E)-9,10-dehydro-12,13-desoxyEpoB, taxol, radicicol or TMC-95A/B.
125. (New) The pharmaceutical composition of claim 121, further comprising a palliative agent.